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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,674	12/27/2001	Charles D. Kowanacki	0115429-00140	7082
29180 7590 08/01/2008 BELF., BOYD, & LLOYD LLP P.O. BOX 1135 CHICAGO, IL 60690				
EXAMINER NGUYEN, HOANG M				
ART UNIT 3748		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/026,674

Applicant(s)

KOWANACKI ET AL.

Examiner

Hoang M. Nguyen

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 6-10 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 11-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

Applicant's amendment dated July 08, 2008, has been fully considered.

The amendment is objected to because bracket and underlining are to be used to reflect only the changes in the text from the original patented text and not from the previous amendment. & 1.173(g).

Applicant argued the retaining means in claim 5 is definite because "in addition to the retaining cap bracket 28, the instant application also includes the retaining cap bracket 28, neck 29, and engine bracket 32". The Examiner disagrees with this argument. Claim 5 is dependent from claim 4 and claim 4 already recites all the elements mentioned by Applicant, namely cap bracket 28, mouth (neck 29), and engine-to-canister bracket 32. It's unclear what other elements can be considered as retaining means in claim 5.

Applicant has amended the claims to overcome the previous rejections under 35 USC 112, 102, 103. However, a new ground of rejections has been made based on newly discovered references from further searches.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, it's improper to recite a retaining means that is broader than the independent claim.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 11-13, 16-18, are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 4162614 (Holleyman) in view of US 1993168 (Hatchman).

Holleyman discloses an air engine comprising many cylinders, an inlet manifold 38 being rigidly and directed connected with said cylinders and a rechargeable air canister 28, said canister 28 having an inlet check valve 36 to recharge air into the tank, the manifold 38 having regulator valves 40 for controlling the air input into the engine. Holleyman does not disclose a cap bracket for retaining or connecting the canister with the manifold. Hatchman discloses it's well known to use a cap bracket 12 with internal threads for connecting a canister 13 with an inlet manifold pipe 30 that allows continuous flow. It would have been obvious to modify the canister in Holleyman to have a retaining cap bracket as taught by Hatchman for the purpose of more effectively retaining the canister with the manifold pipe.

Claims 1, 3, 11-13, 16-18, are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 819653 (Hawke) in view of US 1993168 (Hatchman).

Hawke discloses an air engine comprising a cylinder 12, an inlet manifold 14 being rigidly and directly connected with said cylinder and a rechargeable air canister 2, said canister 2 having a pump to recharge air into the tank, the manifold 14 having regulator valve 15 for controlling the air input into the engine. Please note the inlet manifold of this invention is simply a pipe; therefore, the pipe 14 in Hawke can be used to meet the claimed chamber/manifold. Hawke does not disclose a cap bracket for retaining or connecting the canister with the manifold. Hatchman discloses it's well known to use a cap bracket 12 with internal threads for connecting a canister 13 with an inlet manifold pipe 30 that allows continuous flow. It would have been obvious to modify the canister in Hawke to have a retaining cap bracket as taught by Hatchman for the purpose of more effectively retaining the canister with the manifold pipe.

Claims 21-26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 4159705 (Jacoby) in view of US 1993168 (Hatchman).

Jacoby discloses an air engine comprising a cylinder 15 and a piston 22, an inlet manifold 16 being rigidly and directly connected with said cylinder and a rechargeable air canister 38, a chamber 24 of the manifold 16 having two channels forming two inlets connected with said air canister 38 and a hand pump 40 to recharge air into the tank, the manifold 16 having regulator valve 48 for controlling the air input into the engine. Please note manifold 16 is continuous material and forms a part of the cylinder 15. Jacoby does not disclose a cap bracket for retaining or connecting the canister with the manifold. Hatchman discloses it's well known to use a cap bracket 12 with internal

threads for connecting a canister 13 with an inlet manifold pipe 30 that allows continuous flow. It would have been obvious to modify the canister in Jacoby to have a retaining cap bracket as taught by Hatchman for the purpose of more effectively retaining the canister with the manifold pipe.

Claims 1-3, 11-26, as best understood and as far as definite, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4614085 (Neukomm) in view of U.S. 4329806 (Akiyama et al) and US 1993168 (Hatchman). Neukomm discloses a pneumatic engine comprising an inflatable compressed gas canister 13, an inlet manifold (crankshaft housing 4) for rigidly and directly connected with said canister and cylinder, a means including a valve 17 and a check valve 9 which can be open to allow a continuous flow of air from the canister to the engine. Neukomm does not disclose 1) air is the working fluid, and 2) the air canister is rechargeable in working position, and 3) the retaining cap bracket. Akiyama et al discloses a pneumatic engine comprising a rechargeable canister 20, an engine cylinder 12, a valve 90, the chamber formed by reference numeral 46 clearly has two channels, one channel 42 is connected with the canister 20, and a second channel 48 being connected to said valve, and also a third channel 64 is also connected to said valve 90. Hatchman discloses it's well known to use a cap bracket 12 with internal threads for connecting a canister 13 with an inlet manifold pipe 30 that allows continuous flow. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use air as the working fluid in Neukomm as taught by Akiyama for the purpose of achieving

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appropriate work output and because air is a less expensive source of energy, and the valves having two channels in Neukomm as taught by Akiyama et al for the purpose of being able to recharge the air canister during operating condition. Also, it would have been obvious to modify the canister in Neukomm to have a retaining cap bracket as taught by Hatchman for the purpose of more effectively retaining the canister with the manifold pipe.

Claims 4, 6-10, are allowed.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hoang M Nguyen/
Primary Examiner, Art Unit 3748

HOANG NGUYEN
PRIMARY EXAMINER
ART UNIT 3748

Hoang Minh Nguyen
8/1/2008